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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,478	11/19/2001	Nathaniel Heard	9692.6807	5130

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EXAMINER

KNABLE, GEOFFREY L

ART UNIT PAPER NUMBER

1733

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/992,478	<b>Applicant(s)</b> HEARD, NATHANIEL	
	<b>Examiner</b> Geoffrey L. Knable	<b>Art Unit</b> 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                       |                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____                                                |

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1. Claims 5, 8 and 9 are objected to because of the following informalities:

In the last line of claims 5 and 9, "en" should be --end--. In line 4 of claim 8, "having" is needed after "second side wall". Appropriate correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Clarke (US 1,450,170) or Courtenay (US 1,260,651) or Jacobs (US 921710) or May (US 794,372) or Hequembourg (US 764,891) or Desson (US 1,025,610).

Each of Clarke (note esp. fig. 3), Courtenay (esp. fig. 3), Jacobs (esp. figs. 1-2), May (esp. fig. 1), Hequembourg (esp. figs. 3-5) and Desson (esp. fig. 1) clearly discloses modular tires that include first and second sidewalls as well as a replaceable tread clamped therebetween using bolts. Further, an inner tube is included in each tire, this being considered to read on the claimed "at least one inflatable inner tube segment".

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5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke (US 1,450,170) or Courtenay (US 1,260,651) or Jacobs (US 921710) or May (US 794,372) or Hequembourg (US 764,891).

As to claims 5 and 6, by virtue of the bolts shown in each reference, corresponding holes in the sidewalls and treads are considered to clearly be present. Further, bolts and nuts are disclosed although it is not clear if they are in any way captive to adjacent parts. It however is taken to be extremely well known per se to provide nuts in captive form to ease assembly, provision of such being therefore obvious for only the expected results.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke (US 1,450,170) or Courtenay (US 1,260,651) or Jacobs (US 921710) or May (US 794,372) or Hequembourg (US 764,891) or Desson (US 1,025,610).

As to claim 2, although the references do not show split rims with hubs, such are considered well known per se in this art (e.g. to ease tire/rim assembly) and their use to secure any tire including those of the references is considered obvious for only the expected results.

7. Claims 3, 7 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke (US 1,450,170) or Courtenay (US 1,260,651) or Jacobs (US 921710) or May (US 794,372) or Hequembourg (US 764,891) or Desson (US 1,025,610) as applied above, and further in view of Ho (US 4,884,609) and/or Callaghan (US 503560).

These claims additionally define the presence of plural inflatable inner tube segments whereas the primary references only show a single inner tube segment. It


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however is known in this art to provide an inner tube in the form of a plurality of inflatable segments so that if one segment is punctured, the others retain air (e.g. col. 1 of Ho) and further so as to allow removal/replacement of a single segment (e.g. page 2 of Callaghan). To provide plural segments would therefore have been obvious to enhance puncture protection as well as improve repairability.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Geoffrey L. Knable  
Primary Examiner  
Art Unit 1733

G. Knable  
June 26, 2004